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Tying Tradition to Science and Technology

The Forest Service in 1984

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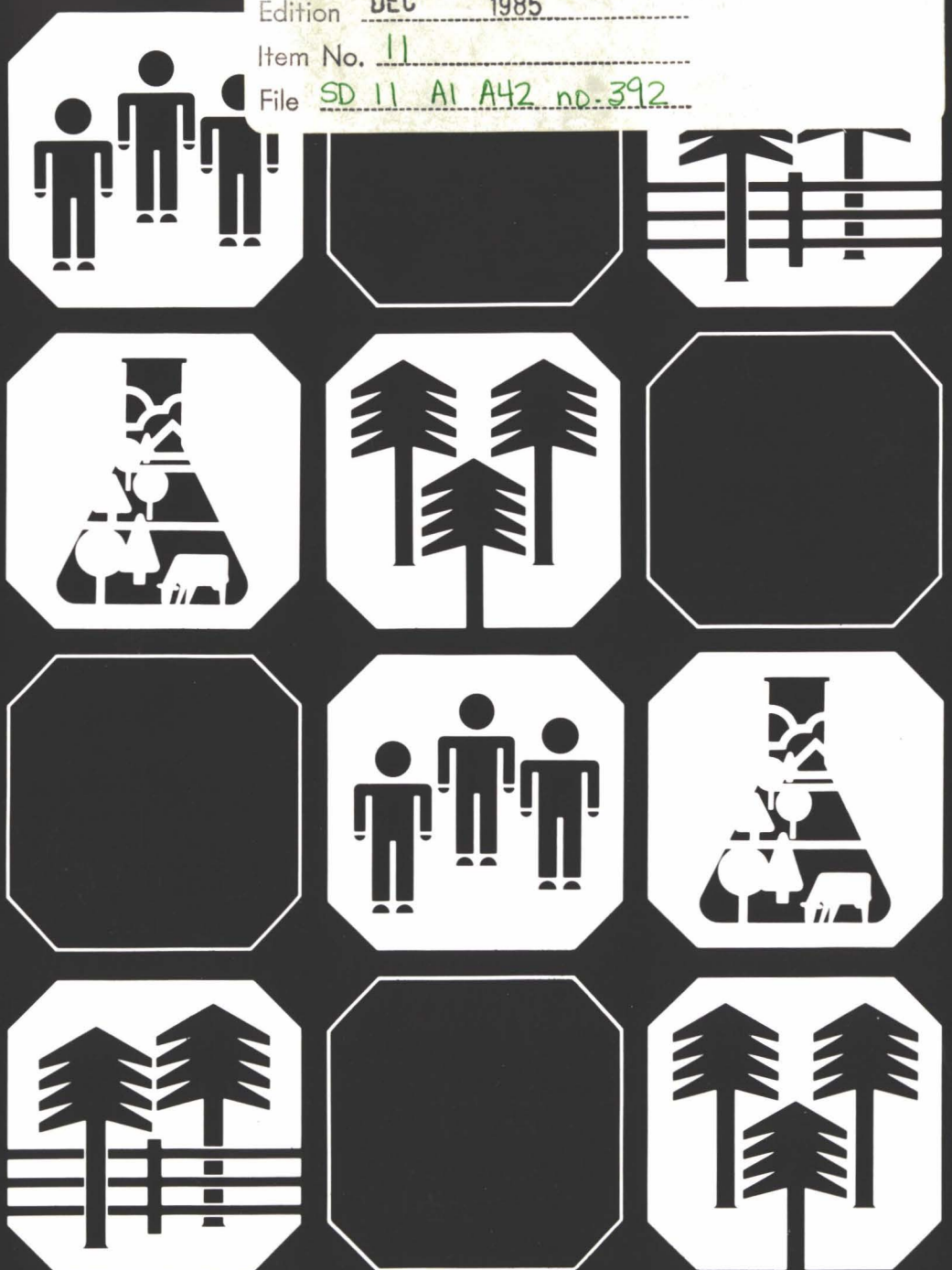


• Tying Tradition To Science and Technology •

When the Forest Service was created, specific steps for the nurture of some of the Nation's natural resources were outlined. Accompanying these steps through the agency's formative years was a growing system of values. These values developed into a tradition that was essential for the success of the Forest Service's daily business. The first Forest Service Chief, Gifford Pinchot, initiated some of these values by applying scientific principles, new to American forestry, to a philosophy of active conservation leadership.

These traditional values today are known as public service, professionalism, integrity, conservation leadership, and efficient management. Adherence to these traditional values is a progressive characteristic. They provide a sturdy and familiar basis for natural resource management. But tradition alone is not enough. Today, tradition has become visibly linked with science and technology as the forces needed to ensure success and accountability for the Federal agency.

In 1984,[1] traditional values and technology teamed to change the Forest Service. They helped the agency run more efficiently by providing opportunities to eliminate costly and time-consuming methods.

• Administration •

Administration was one important starting point for streamlining operations through technology. For several years, intra-agency committees had looked at ways to improve the efficiency and effectiveness of Forest Service programs. In 1984, however, two administrative reviews were designed specifically to incorporate new technology as well.

The National Systems Management Review was a yearlong study to determine how to develop a successful information management system. The study was designed to serve the Forest Service for 5 years and to set the stage for further improvements in the years beyond. The review concluded that in order for information management to work on such a large scale, strong leadership was needed, as well as a guiding and monitoring process, the latest computer technology, and policies to expand the system to cooperators, such as universities and State agencies.

A major technological step occurred with the installation of an integrated information processing system linking agency headquarters in Washington, DC, and field offices across the country. The system was designed to reduce the burden of paperwork and move information quickly to resource managers.

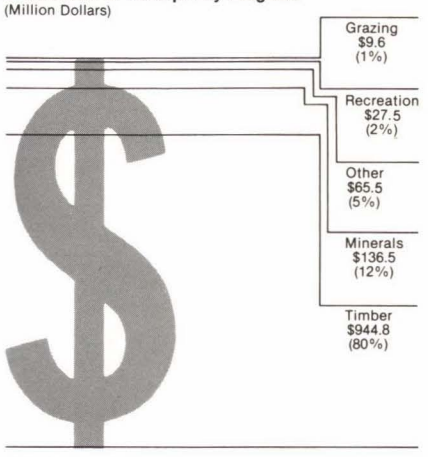
Expansion of this system, to occur over the next few years, will cut time and costs associated with information dissemination among the widely scattered field offices. The system will aid in the creation and sustenance of the information management system detailed in the National Systems Management Review.

The second study, the National Administrative Review (NAR), was charged with identifying ways to reduce the Forest Service's overall administrative support costs, while at the same time minimizing negative impacts on employees.

Review teams, composed of Forest Service employees from around the country, came up with 47 recommendations that could save $18.2 million and 631 full-time equivalents by FY 1987. The recommendations were in nine major areas: management strategies, temporary employment, classification, performance evaluation, placement, adverse action, automation, payroll, and organization.

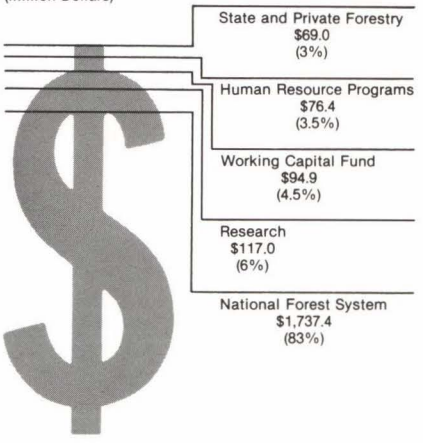
The initial NAR team identified management support activities that could be eliminated, simplified, centralized, regionalized, or shared. Four other teams identified actions that would reduce administrative support cost and staffing; identified activities with long-term centralization payoffs; developed ideas presented by the initial team; and developed steps to accomplish all proposed actions.

Distribution of Receipts by Program
(Million Dollars)



Total 1984 receipts—$1,183.9 million

Distribution of Expenditures by Program Area
(Million Dollars)



Total 1984 expenditures—$2,094.7 million

[1]Throughout this publication, "1984" refers to the fiscal year from October 1, 1983, to September 30, 1984, unless otherwise specified.

• National Forest System •

Resources—Several events in the National Forest System unit of the Forest Service emphasized traditional values, such as public service and conservation leadership, while examining ways to incorporate technology for better management.

Two significant events highlighted the value of wilderness. Others focused on methods of timber sale and harvesting.

The 20th anniversary of the Wilderness Act passed in 1984. The Wilderness Act was the first legislation in world history to accord national protection specifically to a system of wildernesses. Many thought it important to treasure some of America's past through areas set aside to preserve wildland in its natural state.

The initial National Wilderness Preservation System included 54 wildernesses totaling 9.1 million acres, all in the National Forest System, administered by the Forest Service. The agency was the first, prior to 1964, to administratively designate undeveloped areas for similar protection.

Over the years the system grew to include other lands administered by the Forest Service and by other agencies. By 1983, National Forest wilderness acreage totaled over 25 million acres in 171 wildernesses.

Fittingly, during the 20th anniversary of the establishment of the Wilderness Preservation System, the 98th Congress passed, and President Reagan signed, 20 bills creating 6,763,737 additional acres of National Forest System wilderness. Two of them were for single wildernesses while the remainder were statewide bills that added a total of 162 wildernesses. During the same period, the legislation released 13.8 million acres in 20 States for uses other than wilderness.

These actions increased wilderness acreage in the National Forest System to 32.1 million with 326 individual wildernesses. This leaves only 17.3 million acres from Roadless Area Review and Evaluation (RARE II) recommendations not designated as wilderness or released for other purposes.

Meanwhile, at the other end of the multiple use spectrum, some issues arose regarding the Forest Service administration of timber sales. Two of them concerned aid to purchasers of National Forest timber who were confronted with a decreased market for wood products.

A 1983 interim extension of timber sale contracts became final. The extensions applied to certain National Forest timber sale contracts bid before January 1, 1982. Under this policy extensions of National Forest timber sale contracts could be granted for a maximum of 5 years, but purchasers had to submit for Forest Service approval a plan to schedule harvesting of all their public timber sales over the 5-year extensions.

Continued concern by industry and communities about the marketability of the timber contracted for harvest, particularly in the Northwest, prompted Congress to pass a bill to allow many of these same timber purchasers an opportunity to terminate their contracts. The Federal Timber Contract Payment Modification Act directed the Secretaries of Agriculture and the Interior to terminate timber sales upon request of purchasers and payment of a buy-out charge.

The bill specified eligibility (those who applied for the extensions are included); the amount of timber terminated per purchaser; limitations on the timber sales program in the Northwest Region; and the amount of the buy-out charge.

Planning—Increased use of science and technology continued to help in planning natural resource management on a national scale. In 1984, the draft Environmental Impact Statement for the 1985–2030 Resources Planning Act (RPA) program was released. The second 5-year revision, it described the affected environment and the potential consequences of implementing each of nine Forest Service program alternatives available for review and comment.

RPA provides the long-range planning frame for Forest Service activities to help ensure that the United States has an adequate supply of renewable natural resources, while maintaining the quality of the environment. The final program was expected to be transmitted to Congress in early 1985. The updating procedure will be repeated in 1990.

Progress also continued on individual National Forest plans. Each Forest plan is tailored to meet the best resource use of the area it encompasses and serves.

By the end of the 1984, a total of 59 National Forest plans had been released or cleared for publication—the half-way point to completion of all draft forest plans. Eleven final forest plans had been published.

Concurrent with these efforts was the statewide forest resources planning process. In 1984, 5 States completed draft plans and 5 States completed final plans covering a total of 180 million acres. The States are coordinating their plans with Forest Service plans.

Legislation passed to give aid to loggers.

•State and Private Forestry•

In 1984, technology and tradition didn't stop inside the Forest Service. Extensions of both flowed over to the National Forum on Non-Industrial Private Forest Lands. The forum was the culmination of a year's effort by a national steering committee, representing the Forest Service, industry, professional foresters, the American Forestry Association, State forestry agencies, and the Cooperative Extension Service.

Such an effort to address new ideas and incentives for the productive management of small woodlands was considered essential since about 58 percent of the Nation's commercial forest land is in the hands of 7.8 million nonindustrial private owners. Failure to manage these forests for timber production could affect the future availability of wood and wood products.

The forum highlighted 17 issues and identified organizations responsible for acting on these issues. The information shared among forum participants opened new avenues of communication and promises future cooperation and productivity from these valuable landowners.

Accomplishments in protection of forest resources also highlighted 1984. Public service and conservation leadership, teamed with increasingly better technology, have contributed to a 7-million-acre decrease in wildland acreage lost to fire since 1984. A share of this belongs to the fire prevention symbol to the Cooperative Forestry Program, Smokey Bear.

In 1984, Smokey celebrated his 40th birthday as a campaign symbol to reduce uncontrolled, human-caused fires in the Nation's forests. He evolved from a Wartime Advertising Council campaign for forest-fire prevention that began in 1942.

A yearlong birthday celebration began January 2 when Smokey was featured on a float in the Tournament of Roses parade in Pasadena, CA. Throughout the year, he made personal appearances in 50 States. Additional highlights included the issuance of a commemorative stamp by the U.S. Postal Service on August 13, and a Smokey Bear Week proclamation by the President for October 7–13.

Fire prevention symbol Smokey Bear celebrated his 40th Birthday.

• Forest Research •

Two issues affecting the health of the Nation's natural resources were the focus of research projects during 1984. Technology played a key part in this research on atmospheric deposition (acid rain) and forest pests.

The Forest Service, one of several agencies involved, completed several studies of atmospheric deposition as part of the National Acid Precipitation Assessment Program (NAPAP). Concern that atmospheric deposition in the United States might be causing lakes and streams to become more acidic than normal led to the establishment of the program by Congress in 1980.

In addition, concern developed over the effect atmospheric deposition might be having on forest health, vigor, and growth. In the past few years, observations in the Eastern United States have shown some reductions in all of these.

In 1984, Forest Service researchers studied the possible effects of atmospheric deposition on waters and forest vegetation. Some of the studies completed showed that:

- Nitrogen oxide emissions from the Los Angeles basin are a major source of dry acid deposition affecting nearby mountain watershed.
- Acidification of some clearwater lakes in the northern Lake States is related to acid precipitation.
- Pitch pine seedlings treated with acidic rain during two simulated growing seasons actually grew better than control seedlings, possibly because extra nitrogen is available in acidic soil.
- Sap of several tree species studied was more acidic than normal because more nitrogen was incorporated into the trees' amino acids.

Information produced from these and other studies will contribute to the National Acid Precipitation Assessment Program's assessments of acid deposition in 1985, 1987, and 1989.

Another effort using technological expertise to aid the management of natural resources concerned tree pests. The Canada/United States Spruce Budworms Program (CANUSA), established in 1977, finished its work on September 30, 1984.

Trees defoliated by spruce budworms.

CANUSA was a joint international program to determine safe economical controls for spruce budworms, and to develop strategies to manage forests susceptible to budworm damage. Leaders in this program were the U.S. Department of Agriculture and the Canada Department of the Environment.

Among the items CANUSA developed were:

- Strategies to prevent or reduce losses during outbreaks through improved forest management practices that minimize reliance on chemical controls.
- Hazard rating guidelines to identify areas where there is a potential for high budworm damage.
- New products and markets for budworm-killed trees and salvage guides for use of threatened or damaged stands.
- A system to help managers choose the most effective strategy for dealing with budworms.

• The Future •

In 1984, the Forest Service accelerated a continuing technological revolution within the framework of its traditional values.

Tradition has always played a stabilizing role in the day-to-day business of the Forest Service. But it became particularly valuable in lending discipline to technological changes necessary for successful and efficient agency operation. In essence, the agency effort supported traditional values without being bound by traditional methods.

An agency backed by tradition can manage change to provide for necessities of the present and future.

Tradition instills discipline and technology provides the tools for efficiency. In 1984, tradition and technology combined to set the course for the Forest Service in National Forest management, in State and private cooperation, and in research aimed at bettering the quality of forests and their benefits.

Together they will motivate the Forest Service, in 1985 and beyond, to remain progressive, strong, and adaptable.

April 1985

The Forest Service, U.S. Department of Agriculture, is responsible for Federal leadership in forestry. It carries out this role through four main activities:

- Protection and management of resources on 191 million acres of National Forest System lands.
- Cooperation with State and local governments, forest industries, and private landowners to help protect and manage non-Federal forest and associated range and watershed lands.
- Research on all aspects of forestry, rangeland management, and forest resources utilization.
- Participation with other agencies in human resource and community assistance programs to improve living conditions in rural areas.

1984 Statistics

Receipts — **$1.18** billion

Expenditures — **$2.09** billion

National Forest System — **190.7** million acres

Timber sold — **10.7** billion board feet

Timber harvested — **10.5** billion board feet

Roads maintained — **340,000** miles

Livestock grazed — **9.9** million animal unit months

Wildlife and fish habitat improvements — **195,000** acres

Wilderness — **32.1** million acres

Recreation use — **228** million visitor days

Woodland owners assisted — **151,000**

Human resource programs — **65,354** persons served

Permanent full-time employees — **30,030**

Mineral operating plans processed — **27,300**